

Abstract

Method for measuring and compensating skews of data transmission lines connecting at least one data
transmission device with a data reception device via a
5 parallel data bus comprising for each data transmission
line the following steps: measuring the relative time
delay of the data transmission line by transmitting a
determined sequence of measurement vectors (MV) each
10 consisting of an alternating bit pattern via said data
transmission line, wherein the bit alternation frequency
is halved with every transmitted measurement vector (MV);
comparing the received measurement vectors (MV')
transmitted via said data transmission line with
15 corresponding reference vectors (RV) stored in said data
reception device; shifting the received measurement
vectors by inserting data unit intervals (UI) until a
received measurement vector (MV') matches a corresponding
reference vector (RV); calculating a relative skew of the
20 data transmission line depending of the number of
inserted data unit intervals (UI) with respect to a
slowest data transmission line; and compensating the
calculated relative skew of the data transmission line by
means of delay elements switched in response to the
25 calculated relative skew.

Figure 7